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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 03/28/2002

SPENCER AND FRANK  
SUITE 300 EAST  
1100 NEW YORK AVENUE NW  
WASHINGTON, DC 200053955

EXAMINER

HEWITT II, CALVIN L

ART UNIT

CLASS-SUBCLASS

2161

705-059000

DATE MAILED: 03/28/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,777	10/01/1998	MIKI MULLOR	REINC4237.01	7068

TITLE OF INVENTION: METHOD OF RESTRICTING SOFTWARE OPERATION WITHIN A LICENSE LIMITATION

TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
19	nonprovisional	YES	\$640	\$0	\$640	06/28/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status.  
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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# PART B - FEE(S) TRANSMITTAL

Complete and mail this form, together with applicable fee(s), to:

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**MAILING INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

7590 03/28/2002

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 1100 NEW YORK AVENUE NW  
 WASHINGTON, DC 200053955

Note: The certificate of mailing below can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

## Certificate of Mailing

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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EXAMINER	ART UNIT	CLASS-SUBCLASS
HEWITT II, CALVIN L	2161	705-059000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required.

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47) attached.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

The COMMISSIONER OF PATENTS AND TRADEMARKS is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, United States Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington, D.C. 20231

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09/164,777	10/01/1998	MIKI MULLOR	REINC4237.01	7068
7590	03/28/2002		EXAMINER	
SPENCER AND FRANK SUITE 300 EAST 1100 NEW YORK AVENUE NW WASHINGTON, DC 200053955			HEWITT II, CALVIN L	
			ART UNIT	PAPER NUMBER
			2161	
DATE MAILED: 03/28/2002				

**Determination of Patent Term Extension under 35 U.S.C. 154 (b)**  
(application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (<http://pair.uspto.gov>)

# Notice of Allowability

Application No.

09/164,777

Examiner

Calvin L Hewitt II

Applicant(s)

MULLOR ET AL.

Art Unit

2161

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2-5-02.
2. ☒ The allowed claim(s) is/are 1-10, 13 and 16-23.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

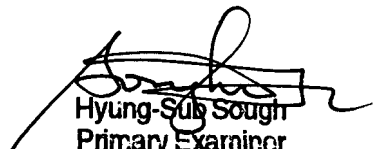
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |   |  |
|---|--|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)               |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>14</u> . |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>11</u> . | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                       |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material    | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance      |
|   | 9 <input type="checkbox"/> Other   |

  
Hyung-Suk Soung  
Primary Examiner

**Status of Claims**

1. Claims 1-10, 13, and 16-23 have been examined.

**Examiner's Amendment**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeffri Kaminski on 19 February 2002.

3. The application has been amended as follows:

In claim 1, line 2, replace "(BIOS)" with BIOS.

In claim 1, line 3, replace "... computer, \_ and" with "... computer, and"

In claim 20, "using an agent to perform the following steps" [has been]

inserted in line 6, as the second limitation after "loading the application..."

and before "extracting license information...", detailing that the steps of

“encrypting...”, “storing...”, and “subsequently verifying...” are performed by the agent. This **does not** apply, however, to the “acting...” limitation.

***Reasons for Allowance***

4. Claims 1-10, 13, and 16-19 have been allowed. The instant application teaches a method for restricting software use by storing a verification structure in a computer BIOS.

It is well known to those of ordinary skill in the art of software licensing to monitor the use of software using special code that enforces the preferences of the software provider (e.g. creator, distributor, or service provider), or provider and end-user, by restricting the manner in which an end-user can manipulate (e.g. print, save, redistribute, customize) the software. For example, Ginter et al. (US 5,892,900) implement their software distribution system by dynamically linking a verification structure, such as a PERC or permission record, to software content that dynamically control how the software, and its associated administrative data, may be distributed and used (column 155, lines 46-51). Misra et al. (US 6,189,146) disclose a method for licensing software that uses agents to manage software licenses, and stores the licenses in persistent non-volatile storage (column 12, lines 8-31). Neither reference teaches utilizing BIOS


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as the non-volatile means for storing a licensed software verification structure. Ewertz et al. (US 5,479,639) teach the use of BIOS memory for storing licensing numbers. Hence, it appears initially, that to one of ordinary skill of the art, the combination of Ewertz et al. with either Ginter et al. and/or Misra et al., would render the present invention obvious. However, the key distinction between the present invention and the closest prior art, is that the Misra et al., and Ginter et al. systems and the Ewertz et al. system run at the operating system level and BIOS level, respectively. More specifically, the closest prior art systems, singly or collectively, do not teach licensed programs running at the OS level interacting with a program verification structure stored in the BIOS to verify the program using the verification structure and having a user act on the program according to the verification. Further, it is well known to those of ordinary skill of the art that a computer BIOS is not setup to manage a software license verification structure. The present invention overcomes this difficulty by using an agent to set up a verification structure in the erasable, non-volatile memory of the BIOS.

5. Claims 20-23 have been allowed. The instant application teaches a method for restricting software use by storing license information in a computer BIOS.

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Ginter et al. (US 5,892,900) implement their software distribution system by encrypting (column/line 65/55-66/47) software control information (e.g. PERC) and linking control information, to software content that dynamically manages how the software, and its associated administrative data, may be distributed and used (column 155, lines 46-51). Misra et al. (US 6,189,146) disclose a method for licensing software that stores licenses in persistent non-volatile storage (column 12, lines 8-31). Neither reference teaches utilizing BIOS as the non-volatile means for storing licensing data. Ewertz et al. (US 5,479,639) teach the use of BIOS memory for storing licensing numbers. Hence, it appears initially, that to one of ordinary skill of the art, the combination of Ewertz et al. with either Ginter et al. and/or Misra et al., would render the present invention obvious. However, a key distinction between the present invention and the closest prior art, is that the Misra et al., and Ginter et al. systems and the Ewertz et al. system run at the operating system level and BIOS level, respectively. More specifically, the closest prior art systems, singly or collectively, do not teach extracting licensing information from a software program, encrypting the information and storing it in the BIOS. Further, it is well known to those of ordinary skill of the art that a computer BIOS is not setup to store license information. The present invention overcomes this difficulty by utilizing an agent to verify the application software program using the license information stored in the erasable, writable, non-volatile memory of the BIOS.





6. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
- Infoworld magazine evaluates desktop management software
  - Saito et al. disclose a method for automatic license monitoring
8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (703) 308-8057. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.
- If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James P. Trammell, can be reached at (703) 305-9768.
- Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks  
c/o Technology Center 2100  
Washington, D.C. 20231

or faxed to:

(703) 746-7239 (for formal communications intended for entry),  
(703) 746-7238 (for after-final communications),

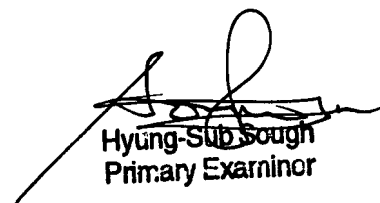
or:

(703) 746-7240 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application  
should be directed to the Group receptionist whose telephone number is (703)  
305-3900.

Calvin Loyd Hewitt II  
February 20, 2002

  
Hyung-Sup Sough  
Primary Examiner

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